

**DECISION
GRAFTON PLANNING BOARD**

**SITE PLAN APPROVAL 2014-9
Construct a 650 kW Solar Energy Generating Facility (solar farm)**

79 Old Upton Road, Grafton

**Borrego Solar Systems, Inc. (Applicant)
Christy Pease (Owner)**

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Decision of the Grafton Planning Board (hereinafter the Board) on the petition of the Borrego Solar Systems, Inc., 1115 Westford Street, 2nd Floor, Lowell, MA 01851 (hereinafter the APPLICANT), for a Special Permit and Site Plan Approval under Section 3.2.3.1 to construct a solar electric generating facility (solar farm) on property located at 79 Old Upton Road, Grafton MA and shown on Grafton Assessor's Map 85, Lot 2D and owned by the Christy Pease, 79 Old Upton Road, Grafton, MA 01519 (hereinafter the OWNER) by deed recorded in the Worcester District Registry of Deeds in Book 45869, Page 221.

I. BACKGROUND

The above referenced application for a Site Plan Approval (hereinafter APPLICATION) was submitted on September 22, 2014. The Planning Board considered the Application at a properly posted meeting of said Board on October 27, 2014 which was continued on the following dates: November 10, 2014, December 8, 2014, January 26, 2015 (no meeting - postponed due to snow storm), February 2, 2015 (no meeting - postponed due to snow storm), February 9, 2015 (no meeting - postponed due to snow storm) and February 12, 2015. Notice of the public hearing and the subject matter thereof was published in the Grafton News on October 8 and October 15, 2014 and posted with Town Clerk's Office. Abutters were notified by First Class Mail. At the public hearing, all those wishing to speak to the petition were heard.

The following Board members were present throughout the public hearing: Vice Chairman Michael Scully, Clerk Sargon Hanna, Members Linda Hassinger and Robert Hassinger, and Associate Member Andrew Clarke who is not eligible to vote on this Application. At the hearing the following people presented the Application: Mr. Steve Borrego and Mr. T. J. Murphy of Borrego Solar Systems, Inc. At the public hearing, all those wishing to speak to the petition were heard. Following public input the hearing was closed.

II. SUBMITTALS

The following items were submitted to the Board for its consideration of this application:

EXHIBIT 1. Application packet prepared and submitted by the Borrego Solar Systems, Inc., received September 22, 2014; consisting of the following:

- Application for Special Permit, dated September 4, 2014; 1 page.
- Application for Site Plan Approval, dated September 4, 2014; 1 page.
- Certified Abutters List signed by the Assessor's Office on September 8, 2014; 1 page.
- Certificate of Good Standing; signed by the Treasurer / Collector's Office on September 9, 2014; 1 page.

- Special Permit Submission, 650 kW Solar Energy Generating Facility, 79 Old Upton Road; prepared and submitted by Borrego Solar on behalf of Christy Pease; dated September 9, 2014, received September 22, 2014; includes the following:
 - Project Description, 3 pages.
 - Operations & Maintenance Manual – Annual Site Inspection Protocol; 2 pages.
 - Lighting Photo; color; 1 page.
 - Site Locus Map; 1 page.
 - Site Aerial Map; color; 1 page.
- Plan set; 79 Old Upton Road, Grafton, MA – Special Permit Application – 650 kW DC STC Rated Solar Electric System; prepared by Borrego Solar; 11” x 17” and 24” x 36”, black & white; dated September 8, 2014; includes the following:
 - T-1 Title Page
 - C-0.0 Civil Notes
 - C-1.0 Existing Conditions Plan
 - C-2.0 Layout and Materials Plan
 - C-3.0 Grading and Erosion Control Plan
 - C-4.0 Re-Vegetation Plan
 - C-5.0 Civil Details
 - C-5.1 Reference Details
- Stormwater Management Report, 650 kW Solar Energy Generating Facility, 79 Old Upton Road, Grafton, Massachusetts; prepared by Borrego Solar Energy Systems, Inc.; dated September 8, 2014.

EXHIBIT 2. Project Review Memorandum, Conservation Commission, received September 23, 2014; 2 pages.

EXHIBIT 3. Project Review Memorandum, Zoning Board of Appeals, received September 29, 2014; 1 page.

EXHIBIT 4. Correspondence from Graves Engineering; 79 Old Upton Road Solar Energy Generating Facility Site – Site Plan, Hydrology and Stormwater Review; dated September 29, 2014, received September 30, 2014; 3 pages.

EXHIBIT 5. Correspondence from Graves Engineering; 79 Old Upton Road Solar Energy Generating Facility Site – Site Plan, Hydrology and Stormwater Review; dated and received October 6, 2014; 4 pages.

EXHIBIT 6. Project Review Memorandum, Fire Department; Special Permit (SP 2014-9), 79 Old Upton Road; dated and received October 8, 2014; 1 pages.

EXHIBIT 7. Revised application materials submitted by Borrego Solar Systems, Inc.; received October 14, 2014; includes the following:

- Correspondence from Borrego Solar Systems, Inc., 79 Old Upton Road Solar Energy Generating Facility, Revised Site Plan; dated October 10, 2014; 1 page.
- Plan set; 79 Old Upton Road, Grafton, MA – Special Permit Application – 650 kW DC STC Rated Solar Electric System; prepared by Borrego Solar; 11” x 17”, black & white; revised through October 9, 2014; includes the following:

- T-1 Title Page
- C-0.0 Civil Notes
- C-1.0 Existing Conditions Plan
- C-2.0 Layout and Materials Plan
- C-3.0 Grading and Erosion Control Plan
- C-4.0 Re-Vegetation Plan
- C-5.0 Civil Details
- C-5.1 Reference Details

EXHIBIT 8. Correspondence from Fire Department, Special Permit [2014-9] 79 Old Upton Road; dated and received October 16, 2014; 1 page.

EXHIBIT 9. Plan set; 79 Old Upton Road, Grafton, MA – Special Permit Application – 650 kW DC STC Rated Solar Electric System; prepared by Borrego Solar; 11” x 17”, black & white; revised through October 9, 2014, received October 22, 2014; includes the following:

- T-1 Title Page
- C-0.0 Civil Notes
- C-1.0 Existing Conditions Plan
- C-2.0 Layout and Materials Plan
- C-3.0 Grading and Erosion Control Plan
- C-4.0 Re-Vegetation Plan
- C-5.0 Civil Details
- C-5.1 Reference Details

EXHIBIT 10. Project Review Memorandum, Department of Public Works, received October 23, 2014; 1 page.

EXHIBIT 11. Project Review Memorandum, Police Department, received October 27, 2014; 2 pages.

EXHIBIT 12. Copy of Correspondence from the Grafton Conservation Commission to Steve Long of Borrego Solar; Request for Modification – Stormwater Bylaw Permit # 14-004 – 79 Old Upton Road; dated and received October 27, 2014; 1 page.

EXHIBIT 13. Email Correspondence from Lee & Jane Robinson, 115 Old Upton Road; received October 27, 2014; 1 page

EXHIBIT 14. Public Hearing Sign-In Sheet, October 27, 2014; 1 page.

EXHIBIT 15. Google Earth photographs of site submitted by the Planning Department staff; 8 ½ x 11”, color; submitted at the October 27, 2014 public hearing; 2 pages.

EXHIBIT 16. Layout and Materials Plan, revised through October 9, 2014; prepared by Borrego Solar Systems, Inc.; 11 x 17”, black & white; 1 sheet; submitted at the October 27, 2014 public hearing by the Applicant.

EXHIBIT 17. Written Request for Continuance of Public Hearing to November 10, 2014; submitted by the Applicant at the October 27, 2014 public hearing; 1 page.

EXHIBIT 18. Email Correspondence from Rick Anderson, 51 Old Upton Road; received October 31, 2014; 1 page.

EXHIBIT 19. Correspondence from James & Nancy Padula, 7 Browns Road; received November 1, 2014; 1 page.

EXHIBIT 20. Revised application materials submitted by Borrego Solar Systems, Inc.; received November 7, 2014; includes the following:

- Correspondence from Borrego Solar Systems, Inc., 79 Old Upton Road Solar Energy Generating Facility; dated November 6, 2014; 2 pages.
- Plan set; 79 Old Upton Road, Grafton, MA – Special Permit Application – 650 kW DC STC Rated Solar Electric System; prepared by Borrego Solar; 11” x 17”, black & white; revised through November 7, 2014; includes the following:
 - T-1 Title Page
 - C-0.0 Civil Notes
 - C-1.0 Existing Conditions Plan
 - C-2.0 Layout and Materials Plan
 - C-2.1 View Study
 - C-2.2 View Study
 - C-3.0 Grading and Erosion Control Plan
 - C-4.0 Re-Vegetation Plan
 - C-4.1 Landscape Plan
 - C-5.0 Civil Details

EXHIBIT 21. Copy of Memorandum from Allan Beaudry of Noise Control Engineering, Inc. to Stephen Long, PE, Borrego Solar Systems, Inc.; Noise Study, Solar Farm; 79 Old Upton Road Grafton, MA; dated November 7, 2014, received November 10, 2014; 6 pages.

EXHIBIT 22. Public Hearing Sign-In Sheet, November 10, 2014; 1 page.

EXHIBIT 23. Written Request for Continuance of Public Hearing to December 8, 2014; submitted by the Applicant at the November 10, 2014 public hearing; 1 page.

EXHIBIT 24. Project Review Memorandum, Board of Assessors; received November 12, 2012; 1 page.

EXHIBIT 25. Correspondence from Grafton Fire Department, Special Permit (SP 2014-9) 79 Old Upton Road; dated December 4, 2014, received December 5, 2014; 1 page.

EXHIBIT 26. Digital renderings; Special Permit 2014-9 – Borrego Solar / Christy Pease – 79 Old Upton Road – Submitted by the Applicant on December 5, 2014 via email; 8 ½ x 11”, color; 2 pages.

EXHIBIT 27. Plan; Sheet C-4.1 - Landscape Plan –revised December 7, 2014; received December 5, 2014; prepared by Borrego Solar; 11 x 17”, black & white; 1 sheet.

EXHIBIT 28. Email correspondence from Forbes L. Anderson, 24 Keith Hill Road – 79 Old Upton Road; received December 8, 2014; 1 page.

EXHIBIT 29. Email correspondence from Mr. & Mrs. John McCabe, 23 Sibley Street – Browns Road Solar Panel Concerns; received December 8, 2014; 1 page.

EXHIBIT 30. Email correspondence from Mike Treveloni, 10 Adams Road – 79 Old Upton Road and Estabrook Solar Panel Farms; received December 8, 2014; 1 page.

EXHIBIT 31. Email correspondence from Mike Boyle, 9 Carroll Manor – Old Upton Road Solar Farm; received December 8, 2014; 1 page.

- EXHIBIT 32.** Correspondence from National Grid, Proposed Underground Interconnection at 79 Old Upton Rd., Grafton, MA; dated November 26, 2014, received December 8, 2014; 1 page.
- EXHIBIT 33.** Email correspondence from James Padula, Grafton Planning Board; received December 8, 2014; 1 page.
- EXHIBIT 34.** Correspondence to the Planning Board from John & Claire Haggerty; no date; received December 8, 2014; 3 pages.
- EXHIBIT 35.** Public Hearing Sign-In Sheet, December 8, 2014; 1 page.
- EXHIBIT 36.** Written Request for Continuance of Public Hearing to January 26, 2015; submitted by the Applicant at the December 8, 2014 public hearing; 1 page.
- EXHIBIT 37.** Email correspondence from Sean Padgett, Old Upton Road Solar Installation; received December 9, 2015; 1 page.
- EXHIBIT 38.** Correspondence from Attorney Richard Ricker, Removal of a portion of property at 79 Old Upton Road, Grafton Massachusetts, Owned by Christy Pease, from M.G.L. Chapter 61A; dated January 14, 2015, received January 16, 2015; 2 pages.
- EXHIBIT 39.** Email Correspondence from Steve & Lori Belfiore, 79 Old Upton Rd project; received January 23, 2015; 1 page.
- EXHIBIT 40.** Email Correspondence from Attorney Joseph Antonellis, RE: Revised plans for 79 Upton Road; received January 26, 2015; 1 page.
- EXHIBIT 41.** Revised application materials submitted by Borrego Solar Systems, Inc.; received January 21, 2015; includes the following:
- Correspondence Borrego Solar, 79 Old Upton Road Solar Energy Generating Facility; dated and received January 21, 2015; 2 pages.
 - Plan Set; 79 Old Upton Road, Grafton, MA – 649.040 kW DC STC Rated Solar Electric System; 11” x 17”, color; prepared by Borrego Solar; revised through January 21, 2015; 12 sheets as follows:
 - T-1 Title Page
 - C-0.0 Civil Notes
 - C-1.0 Existing Conditions Plan
 - C-2.0 Layout and Materials Plan
 - C-2.1 View Study
 - C-2.2 View Study
 - C-2.3 View Study
 - C-2.4 View Study
 - C-3.0 Grading and Erosion Control Plan
 - C-4.0 Re-Vegetation Plan
 - C-4.1 Landscape Plan
 - C-5.0 Civil Details
- EXHIBIT 42.** Plan; 650 kW Solar Electric System, 79 Old Upton Road, Grafton, MA, Sheet C-4.1 Landscape Plan; prepared by Borrego Solar; dated December 7, 2014, revised January 30, 2015; 11 x 17”, black & white; 1 page.

- EXHIBIT 43.** Email Correspondence from Reginald and Jean Anderson, 61 Old Upton Road - Opposition to Pease / National Solar Plan; dated February 7, 2015, received February 9, 2015; 1 page.
- EXHIBIT 44.** Email correspondence from TJ Murphy, Maintenance on landscape; received February 12, 2015; 1 page; includes the following attachment:
- Exhibit B – Schedule of Definitions; no date; 11 pages.
- EXHIBIT 45.** Email Correspondence from Rick Anderson, Pease Solar Project; received February 12, 2015; 1 page.
- EXHIBIT 46.** Email Correspondence from Lee Robinson – 115 Old Upton Road, Borrego Solar Project; received February 12, 2015; 1 page.
- EXHIBIT 47.** Email Correspondence from Craig Brazell, Solar Farm Off 79 Old Upton Road; received February 12, 2015; 1 page.
- EXHIBIT 48.** Email Correspondence from Jim Padula, Jr., 7 Browns Road - 79 Old Upton Road Solar Project; received February 12, 2015; 1 page.
- EXHIBIT 49.** Email Correspondence from Peter Rawson, Opposition to the 79 Old Upton Road Solar Farm Plans; received February 12, 2015; 1 page.
- EXHIBIT 50.** Public Hearing Sign-In Sheet, December 8, 2014; 1 page.

III. FINDINGS

At their meeting of April 27, 2015 after due consideration of the exhibits submitted and the entire record of proceedings introduced and accepted in this matter, the Grafton Planning Board (motion by Mr. Hanna, seconded by Mr. Hassinger) voted 4-0 in favor to make the following Findings:

- F1. That determinations regarding the following findings are based upon the plans identified in this Decision, as well as the information and materials submitted and presented in association with the Application.
- F2. That determinations regarding the following findings are also predicated upon satisfactory completion of the work and site improvements shown on the Plans in accordance with this Decision, as well as all applicable Federal, State and Local regulations, except where modified by this Decision.
- F3. That the subject site is located within a Residential 40 (R40) zoning district (see EXHIBIT #1).
- F4. That Section 1.3.3.2 of the ZBL requires that the procedure for Site Plan Review, as defined in the ZBL, be incorporated into the procedure for reviewing Special Permits. The Board finds that the Applicant submitted an Application for a Special Permit (SP 2014-9) in conjunction with this Site Plan Approval Application. The Special Permit Application was considered in conjunction with this Site Plan Approval Application at a public hearing as referenced in Section I: Background of this Decision. The Board's Decision regarding the Special Permit Application is filed under separate cover due to voting eligibility constraints of the Board.
- F5. That Section 1.3.3.3 of the ZBL defines the procedure for Site Plan Review, including a description of the plans and materials to be submitted to the Planning Board. The Board further finds that

Section 1.3.3.4 of the ZBL allows an applicant to request waivers from certain requirements of the Site Plan Review procedure. The Applicant did not submit any waiver requests (see EXHIBIT #1).

- F6. That during the public hearing the Board and Applicant discussed the nature of the application. The current site is 14.3 acres. Presently on site are the Owner's family farm residence and several outbuildings associated with the farming operation. The site is bordered by large lot residential properties to the south and east. It is bordered to east and north by a single lot owned by the Grafton Land Trust and known as the Prescott Wildlife Sanctuary to the east and the Anderson-Crosier Wood to the north. There are a series of interconnecting trails on the Land Trust property (see EXHIBIT #15). The proposed solar farm has been designed to occupy approximately 4 acres on the north east portion of the site. The proposed site is comprised of open field with a hedgerow which the Applicant is proposal to remove as part of the site development. A new landscaping plan will reestablish a vegetative screen and the current horse paddock fence will be replaced and moved closer to Old Upton Road as shown on the plans. The Applicant is proposing the construction of a 650 kilowatt solar electric generating facility which involves the installation solar panels / modules and associated racking, power inverter enclosures, power transformers, underground electrical conduits, overhead interconnection transmission line, access and maintenance roads, security fencing and landscaping to provide screening of the site. The project will be situated in portion of an existing open field with minimal tree cutting and earth disturbance. The Applicant states that there will be no hazardous materials or substances associated with the operation of the system (see EXHIBIT #1). The existing horse paddock will be reduced in size and a new fence will be installed as the Owner plans to continue to use the site in the same manner as before the project installation.
- F7. That during the public hearing the Board received testimony from Christy Pease (Owner) and Mr. Jay Husson of 79 Old Upton Road. They reviewed the reasons that she is proposing this project. She currently operates a small business of leasing stalls in her barn for boarding and for horseback riders to congregate in advance of trail rides in the area. She wants to continue to run this agricultural use but needs additional income to support the operation and enable her to maintain the whole site which includes barns and an antique house. The entire lot size is currently 14.30 acres and she's looking to put the solar facility on approximately 4 of those acres. The income from the lease of the land for the solar facility along with the free electricity to serve the rest of her property will enable them to maintain the rest of the site. Mr. Husson noted that they are not receiving any money from the electricity generated from the solar facility. Both Ms. Pease and Mr. Husson noted that they were aware of and sensitive to the concerns of their neighbors. They noted that they opted to seek this type of use as they felt it was less impactful to the neighborhood then selling the property for residential development which would add costs to the Town by way of increased services, schools and road maintenance.
- F8. That during the public hearing the Board and the Applicant discussed the project as it relates to the solar electric generation. The Applicant stated that this project was part of a grant program established by National Grid to build small test sites to evaluate the new systems that would capture solar energy from east facing orientations as opposed to the industry standard of south facing installations. The solar array for this project is east facing. In addition National Grid is looking to evaluate the impacts of smaller arrays on the local distribution system. The Applicant noted that this was not a commercial venture and that there was no power purchase agreement associated with the project. The Owner will not be receiving a financial benefit from the electrical energy generated from the solar facility as this is a private venture owned and operated by National Grid on land leased from the Owner.

- F9. That during the public hearing the Board and Applicant emergency fire access requirements. The Board received correspondence from the Fire Department noting that they had reviewed the plan set dated November 7, 2014 (EXHIBIT #20) and was satisfied that their concerns had been met. They require that the Applicant maintain a minimum fire lane of 18 feet at all times and that the emergency access road be maintained in all seasons to allow for adequate emergency access. They also requested that the vegetation on and adjacent to the site be maintained (see EXHIBIT #25).
- F10. That during the public hearing the Board and Applicant discussed visual impacts on the abutting properties and neighborhood in general. This issue was raised multiple times throughout the entire public hearing process and several revised landscaping plans were submitted to address issues as they arose (see EXHIBITS #F1, #F7, #F9, #F20, #F27, #F41, #F42). The primary concern of the Applicant was to avoid a landscaping plan that would result in shading of the solar panels which would interfere with their ability to maximize the intake of solar energy. Immediate abutters were concerned about direct sight lines in all seasons from their properties with regards to visibility of the security fencing, solar panels, on site equipment as well as creating a landscaping plan that was reflective of the surrounding environment. Residents raised concerns about the impacts to recreational uses in the area, specifically to the trail system on the abutting Grafton Land Trust properties, as well as impacts to the viewsheds along Old Upton Road. The Board arranged for a site visit on November 30, 2014 which was attended by abutters as well as Board members. The Applicant, at the request of the Board provided some stakes on the proposed site to show a number of visual benchmarks including the location of the first rows of solar panels. A final revised landscape plan was submitted on January 30, 2014 which, in the opinion of the Applicant addressed all the issues raised during course of the public hearing and the site walk. The Applicant further stated that, at the suggestion of the Board, they had met with abutters separately to finalize the final version of the landscape plan. It is the Applicant's opinion that they had satisfied the all the abutters concerns. Mr. John Haggerty, the abutter at 90 Old Upton Road, did not agree with that opinion (see EXHIBIT #34 and FINDING #F22). Visual screening elements addressed on the final landscape plan included the number, types, size of proposed plantings. Also included was a staggered planting plan to provide a more natural look to vegetative screening. When questioned by the Board, the Applicant stated that all plant varieties would be deer resistant and would not harm the horses which will be in the newly reconfigured paddock adjacent to the site. The Board finds that it is in the best interests of the Town to require some form of performance surety to ensure the adequate installation and maintenance of the vegetative border presented on the landscape plan revised through January 30, 2015 (see EXHIBIT #42) over the life of the project.
- F11. That during the public hearing the Board and Applicant discussed the security fencing. The Applicant stated they planned to install a standard 8 foot galvanized chain link fence around the perimeter of the site for security purposes. Concern was raised about the visual impact of galvanized material. Through the course of the public hearing it was agreed that a black PVC coated fence would be more appropriate (see EXHIBIT #44).
- F12. That during the public hearing the Board and the Applicant discussed the proposed height of the racking system and it relates to the overall maximum height of the solar panels. The originally proposed height of the racking system would allow for a maximum panel height of approximately 10 feet which was of concern given the visual impacts. The Applicant was asked to conduct several view studies from different angles showing the relationship of the proposed security fence and the maximum height of the solar panels in relationship to the site topography to demonstrate the visual impacts on abutting properties and along Old Upton Road in general. The Applicant complied and provided the Board with that information. Upon further review and discussion, the Applicant agreed

to lower the height of the racking system to six feet, seven inches (6' 7") thereby reducing the maximum solar panel height further below the line of sight (see EXHIBIT #41).

- F13. That during the public hearing the Board and Applicant discussed the alley (also referred to as cart path) between 7 Browns & 79 Old Upton Road and how it relates to this project. The alley is owned by and used by Christy Pease to access property she owns behind the property and abutter at 7 Browns Road. It is not a part of proposed project site and disposition of use and clearing is at the will and discretion of the property owner.
- F14. That during the public hearing the Board and Applicant discussed access drive into the site. The first plan submission (EXHIBIT #1) showed the access drive running along the far eastern edge of the site abutting with a driveway opening at the intersection of Browns Road and Old Upton Road and would require removal of existing vegetation. Upon the request of the Owner the plans were revised to move the access drive to west of the site frontage (see EXHIBIT #7). This new alignment would not require any significant clearing of vegetation as the access road would run through what is an open field. This revision was further precipitated through the Owner's discussions with the abutters who preferred a different access point for screening and safety purposes.
- F15. That during the public hearing the Board and Applicant discussed the need for some form of surety that could be accessed by the Town in the event that the facility is abandoned or requires decommissioning. Previous solar farm projects granted a Special Permit had a condition that required decommissioning surety. However, those projects were commercial ventures whereby the owner / operator had entered into a power purchase agreements with the Town or the project was built on Town owned land. This project does not have the same parameters and is not a commercial venture (see FINDING #F8). The Board finds that decommissioning surety is not within their purview for this Application as the project is not a commercial venture and will be developed on private property to which the Owner has sole rights.
- F16. That during the public hearing the Board and the Applicant discussed proposed connection from the site to the National Grid system which is carried on the utility poles along Old Upton Road. The Applicant originally proposed to bring the utility line carrying the solar generated electricity from the project site out to Old Upton Road by way of above ground poles running along the access road. Connection to the utility grid would be made via an overhead wire from the end of the access driveway at 79 Old Upton Road to a pole at the driveway entrance to 90 Old Upton Road. Concerns about utility poles running along the access road in an open field were raised with regards to visual impacts. The plans were revised to have the utility line run from the project site via an underground utility trench adjacent to the access road out to a single pole at the entrance of the access road to Old Upton Road. Connection to the local utility grid would still be made via overhead wire to the pole at the entrance of 90 Old Upton Road. The Board questioned if the overhead utility connection could be run under Old Upton Road to eliminate the need for a pole at the access road entrance. The Applicant provided documentation from National Grid stating that they did not believe there was any benefit to running the service under the road and that underground interconnections across public roadways should be avoided due to higher maintenance costs and roadway maintenance costs including paving, construction and / or roadway widening (see EXHIBIT #32).
- F17. That during the public hearing the Board and Applicant discussed construction period parking and storage of construction materials. Concerns were raised about the impacts to pedestrian and vehicular safety if parking was allowed along Old Upton Road. The Applicant stated that all construction period parking and storage of construction materials would be accommodated on site only.

- F18. That during the public hearing the Board and Applicant discussed potential noise impacts associated with the operation of a fully functional solar facility. The Applicant retained the services of a noise consultant to perform an evaluation of the site pre and post development. The consultant provided a report that stated that the proposed solar farm will comply with State noise regulations at the property line and the nearest residence in both the southern and eastern directions (see EXHIBIT #21).
- F19. That during the public hearing the Board and Applicant discussed security lighting and the potential impacts on the abutters. A security system will be installed which will include a motion sensitive lighting system. The lighting system will only be triggered within the parameters of the project location. The lights will not be on all the time.
- F20. That during the public hearing the Board received written comments from the Police Department requesting that construction signs be posted on Old Upton Road and Browns Road warning the public to use caution and watch for construction vehicles during construction.
- F21. That during the public hearing the Board and the Applicant discussed comments received from Rick Anderson of 51 Old Upton Road expressing concern about property in the immediate vicinity of the site owned by his parents, Reginald and Regina Anderson of 61 Old Upton Road. It was noted that a portion of 61 Old Upton Road, a large subset of the lot, sits on a hill overlooking and in close proximity to the proposed site. The Andersons expressed concern that no screening is proposed for the northern boundary of the proposed solar farm site and that there would be significant visual impacts if a house should be built one day on that portion of the Anderson's lot. The Applicant stated that they would be amenable to a condition stating that if a house should one day be built on that portion of 61 Old Upton Road that the owner of the solar facility will provide appropriate vegetative screening on the northern boundary of the site.
- F22. That during the public hearing the Board received verbal testimony from John Haggerty, abutting neighbors directly across the street at 90 Old Upton Road as well as written testimony from Attorney Joseph Antonellis who was hired to represent Mr. Haggerty. Mr. Antonellis requested that the Applicant address a number of issues for the record as follows:
- Sound - information about the types permanent apparatus and the anticipated decibel levels
 - Poles – requesting no new poles directly in front of 90 Old Upton Road.
 - Bond / Surety – want more information regarding decommissioning and long term maintenance surety.
 - Lighting – will there be security lighting and will it be motion sensitive? How sensitive will the monitors be? Will they be triggered by area wildlife?
 - Screening – a major concern. He requested that the Applicant provide some visualization studies from the Haggerty's front yard.
 - Fencing – requested that it be coated in black and non-reflective.
 - Construction Period storage and parking – requested that areas be screened

Mr. Haggerty, along with other area residents were invited to participate in a site walk on November 30, 2014 with the Applicant and the Board to better assess the existing site conditions (see FINDING #F10). Mr. Haggerty submitted additional written comments after the site walk which included additional concerns (see EXHIBIT #34) as follows:

- Inaccurate statements regarding “extensive existing vegetative screening”; a photograph was submitted which shows the view of his house (90 Old Upton Road, directly across the street from the site); he notes that the tree line along his frontage is deteriorating and does not

provide the screening the Applicant. He contends that the screening at 79 Old Upton Road is non-existent and the screening at 90 Old Upton Road is inadequate and unreliable.

- Impacts to important historic, cultural and scenic landscapes; Mr. Haggerty states that the landscapes of the area are significant and pastoral and that the Applicant has not adequately shown that the project will not significantly impact those resources. He further raises concerns about the impacts to area property values.
- The Applicant's efforts to demonstrate the visual impacts via site markings were inadequate. He noted that the neither the corners not the heights of the front line of the panels were staked in the field and the abutters were unable to evaluate the sight lines drawn on the plan.
- Inadequacy of the proposed screening plan in the types, size, spacing and number of proposed plantings. He further objected to the proposed single row of plantings as inadequate.
- The proposed project is incompatible with surrounding the adjacent properties and surrounding area and would detract.

Mr. Antonellis submitted additional written comments on behalf of Mr. Haggerty stating that the overall size of the project is a concern; that the revised landscaping plan continues to be inadequate with regards to screening; that a significant commercial enterprise in a passive residential area is not appropriate; and that the project will have a negative effect on the values of the abutting property. He further testified at the public hearing that burden of meeting the Special Permit criteria fell on the Applicant.

- F23. That during the public hearing the Board received verbal and written testimony from James & Nancy Padula, abutting neighbors at 7 Browns Road. Their primary issue is ensuring that the project is fully screened not only from their property but from the Old Upton Road frontage. It was noted that the original plan set may not show an accurate representation of existing field conditions and the project will be more visible than is projected on the plan (see EXHIBIT #19). He further noted that the plan shows that the Applicant plans to clear the alley between his property and the site's property owner, Christy Pease. This alley is also owned by Ms. Pease and is used to access the land behind her property abutting the site. Mr. Padula, along with other area residents were invited to participate in a site walk on November 30, 2014 with the Applicant and the Board to better assess the existing site conditions (see FINDING #F10). After the site walk the plans were revised to address some of the issues raised during the public hearing, site walk and staff comments (see EXHIBIT #20). After review of the revised plans, the Padulas submitted additional comments regarding specific design elements such as the height of the proposed panels, planting plan, a more accurate representation of proposed tree clearing, fire department access, impacts to property values, landscape maintenance, fencing, the potential for future expansion, project location on the site and compatibility with the surrounding neighborhood (see EXHIBITS #33 and #48). Mr. Padula stated that he is in opposition to the project (see EXHIBIT #48).
- F24. That during the public hearing the Board received testimony from Mr. Rick Anderson of 51 Old Upton Road. He raised concerns about adequate screening noting that many projects around the state and the area require robust screening plans. He offered to provide a list of locations for the Board to consider. The Board finds that at the close of the public hearing no list was submitted into the written record.
- F25. That during the public hearing the Board received testimony from Mr. Lee Robinson of 115 Old Upton Road expressing concern about screening. He cited the example of the Milford Road solar

installation noting that the screening was inadequate and requested that the screening for this project, if approved, be installed and approved prior to the installation of the solar panels and equipment. The issue of enforcement was raised in that how can the Town ensure that the installed vegetation will be done properly and be maintained so that it thrives.

F26. That during the public hearing the Board received written comments from the public (see EXHIBIT listing). The majority of the residents submitting comments stated their opposition to the project. Concerns specific to the project included the following:

- What will be the impact on property values in the area?
- Visibility from Old Upton Road. Many people noted that that Old Upton Road and the immediate area is pristine, scenic, and historic.
- What provisions are made in the event that the project fails or is abandoned?
- Why is a commercial venture allowed in a residential area / zone? There are commercial areas in Town where this project would be more appropriate. Commercial uses are not allowed in a residential zone.
- Why can someone build a solar plan on open space in this area?
- Farmland is at risk in Town. This type of loophole in the zoning that allows such a use on farmland could set the town up to have solar plans in numerous open fields.
- The aesthetics of these types of projects are detrimental to the Town as they turn beautiful rural farmland into industrialized parks (citing chain link fences and unsightly solar panels).
- The long term health risks of living near one of these facilities have not been studied. Are people who live nearby at risk?
- Concerns about the impacts and ongoing depletion of wildlife habitat in an increasingly developed Town.
- Have environmental impacts been assessed? Concerned about clear cutting, soil erosion , emissions, hail storms, lightning strikes.
- What type of maintenance is being proposed?
- Impacts on the Town's roads with construction and maintenance vehicles needed to access and maintain the site.
- What is the benefit to the Town to allow such facilities? Going "green" does not outweigh the impact to the rest of the Town.
- Solar farms are out of character for the Town. They ruin the Town's country feel and disturb the wildlife.
- The scale of the project is out of proportion for the site and the area. It should be designed to blend in and be screened for maximum visual coverage around the entire perimeter of the site.
- Concerned about the impact this project may have on abutting conservation land (Grafton Land Trust), trails and bucolic nature of the area and the whole Town.
- Several people cited the recent solar installations on Follette Street (Grafton Water District) and Estabrook Avenue (Knowlton Nominee Trust) and how all these projects have been eroding the natural beauty of the Town.

IV. DECISION and CONDITIONS

At their meeting of April 27, 2015 after due consideration of the exhibits submitted and the entire record of proceedings introduced and accepted in this matter, the Grafton Planning Board (motion by Mr. Hassinger, seconded by Mr. Hanna) voted 3-1 (by roll call: L. Hassinger – AYE; Hanna – AYE; R. Hassinger – AYE; Scully – NAY) in favor to **GRANT** this Site Plan Approval with the following conditions:

- C1. This Site Plan Approval specifically authorizes the construction of a 650 kW solar energy generating facility, access road, security features and landscaping as described within the EXHIBITS and FINDINGS of this Decision and in accordance with the conditions set forth in Special Permit SP 2014-9 (under separate cover).
- C2. The work authorized by this Site Plan Approval shall be solely for the purposes noted within Condition #1 of this Decision. In accordance with Section 1.3.3.10 of the Grafton Zoning By-law, the Planning Board may approve, upon request, minor changes to an approved site plan without receiving an application or conducting a public hearing provided such change is, in the opinion of the Board, not substantially different than presented in the materials and information used in making the original Site Plan decision. The Planning Board reserves the right to solicit comments from other Town boards, departments and committees, as well as its consulting engineer, in making determinations regarding such change(s). The Planning Board may, upon its determination, require a modification of the original Site Plan decision if it finds that the proposed changes are substantial in nature and/or of public concern, or substantially alter the plans and information used in making this Decision. The Planning Board, in considering such change(s), shall make specific findings justifying the granting or denying of any such request for minor modification. Any proposed change deemed substantial in nature shall require a modification of the original Site Plan application and decision. Any application for such modification shall be made pursuant to Section 1.3.3 of this By-law.
- C3. Hours of construction and earthwork proposed shall only occur Monday through Friday between the hours of 7:00 a.m. and 5:00 p.m. and Saturdays from 8:00 a.m. and 5:00 p.m. There shall be no construction activity on Sundays or state and federal holidays.
- C4. Construction signs shall be posted on Old Upton Road and Browns Road warning the public to use caution and watch for construction vehicles during construction per the requirements of the Grafton Police Department (see EXHIBIT #11, FINDING #F20). The Applicant will coordinate with the Assistant Town Engineer prior to the type, installation and location of proposed temporary construction period signs.
- C5. All construction period storage and parking shall be on-site and shall not impede traffic along Old Upton Road at any time (see FINDING #F17).
- C6. The Applicant will submit to the Planning Board three 24" x 36" bound sets and a PDF digital copy of the final plan set with revisions agreed upon since the last submission (EXHIBIT #41, full plan set revised through January 21, 2015). The final plan set will include the following:
 - Corrections to all sheets referencing fencing including Sheet C-5.0 and C-3.0 to reflect that all fencing shall be black PVC coated. All references to galvanized fencing will be removed from the plans. This includes the details for the site fencing and the vehicle gate.

- Inclusion of the final approved landscape plan, Sheet C-4.1 revised through January 30, 2015 (see EXHIBIT #42).
 - Addition of note on all relevant sheets and specifically on Civil Notes (C-0.0) and all of the View Study sheets (C-2.1 through C2.4) that the solar panel racking system shall not exceed a maximum height of six feet, seven inches (6' 7") (see FINDING #F____, EXHIBIT #41).
 - Notation on the Landscape Plan C-4.1 indicating that screening will be provided along the northern boundary of the site in the future as needed per Condition #C6 of Site Plan Approval 2014-9.
- C7. The owner of the solar facility shall submit to the Board for approval a vegetative screening plan for the northern boundary of the site in the event that a house is constructed on the north eastern portion of the lot located at and currently known as 61 Old Upton Road as discussed and agreed upon by the Applicant (see FINDING #F21).
- C8. The owner and /or operator of the solar facility will be responsible for the installation and ongoing maintenance of the vegetative border shown on the approved landscape plan for the life of project and until such time as the solar farm is decommissioned, dismantled and removed from the site in its entirety. The owner and / or operator will be responsible for ensuring that the vegetative border is regularly maintained to ensure that the plant material and trees thrive and to replace any material that does not so as to consistently maintain the visual buffer from along Old Upton Road onto the site. Items related to this work include: watering, pruning, trimming, replacement of dead or diseased plant material or trees in a timely and season appropriate manner. The Board reserves the right to have the site inspected by the Board or its agent for compliance with the landscape plan. Any and all work in the future regarding the vegetative border shall be in keeping with the spirit and intent of this Site Plan Approval with regards to ongoing adequate and appropriate visual screening sensitive to and in keeping with surrounding environs. Furthermore, the Board reserves the right require the owner and / or operator to appear before the Board in the event that the Board or its agent find that the vegetative border is not being maintained according to the provisions of this Site Plan Approval.
- C9. The Applicant shall provide a form of surety, prior to the issuance of the building permit, either through an escrow account, bond or otherwise, in the amount of \$50,000 for the purposes of ensuring the vegetative border is installed and maintained in accordance with this Site Plan Approval with particular mention of Condition #C8.
- C10. Per the requirements of the Grafton Fire Department, the Owner will: ensure maintenance of the fire lanes at a minimum width of eighteen (18"); will maintain the access road; will to ensure adequate emergency access at all times. The access road, gate and security facilities shall be maintained at all times to the satisfaction of the Grafton Fire and Grafton Police departments to ensure that emergency service providers will have adequate access and maneuverability at all times This requirement will include but not be limited to snow plowing, grading, maintenance of vegetation within and adjacent to the site. (See EXHIBIT #25 and FINDING #F9).
- C11. Any Order of Conditions and/or permits issued by the Grafton Conservation Commission with respect to this application are hereby incorporated by reference and constitute a condition to this Special Permit Decision.

- C12. Signage for, and associated with, the use authorized by this Decision shall be installed in accordance with, and conform to, the Town of Grafton Zoning By-law. This Decision shall not be construed as approving or authorizing any such signage.
- C13. All grading and construction shall be performed in accordance with the approved Plans, as well as all applicable Federal, State and Local regulations, and shall be accomplished so as not to discharge any pollutants or siltation into waterways or resource areas during construction, and after completion, from the site and its associated improvements.
- C14. Once the solar installation has reached the end of its useful life or has been abandoned it shall be removed. The Owner or Operator shall physically remove the installation no more than 150 days after the date of discontinued operations. The Owner or Operator shall notify the Planning Board by certified mail of the proposed date of discontinued operations and plans for removal. Decommissioning shall consist of but not be limited to:
- Physical removal of all large- scale ground-mounted solar panel installations, structures, equipment, security barriers and transmission lines from the site.
 - Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
 - Stabilization or re-vegetation of the site as necessary to minimize erosion. The Planning Board may allow the owner or operator to leave landscaping or designated below-grade foundations in order to minimize erosion and disruption to vegetation.
- C15. The Owner and/ or Operator of the solar facility will comply with the conditions set for the Operations and Maintenance Plan submitted as part of this Application (see EXHIBIT #1 and #44).
- C16. In accordance with Section 1.3.3.8 of the ZBL, this Site Plan Approval shall lapse within two (2) years from the date of this Decision. All work proposed in the site plan or required by conditions to which the approval was subject must be completed within two (2) years from the date of approval of the site plan unless a longer period is expressly granted in writing at the time of site plan approval or at a later date should the applicant request an extension and the same is granted by the Planning Board. The Applicant did not request in writing a longer period of validity for this Application.
- C17. The Applicant shall comply with all requirements of Section 1.3.3 – Site Plan Review - of the Grafton Zoning By-law. Pursuant to Section 1.3.3.9, all work shown on an approved site plan shall be completed and all related conditions of approval shall be satisfied prior to the issuance of an occupancy permit.
- C18. This Site Plan Approval shall not take effect until the Decision has been recorded at the Worcester District Registry of Deeds (WDRD) and provided the Planning Board and the Building Department with a copy of such recording, including the WDRD Book and Page Number and/or Instrument Number.
- C19. By recording this Site Plan Approval Decision in the Worcester District Registry of Deeds, the Applicant agrees to and accepts the conditions set forth in this Special Permit and Site Plan Approval Decision.

V. RECORD OF VOTE

Constituting a majority of the Planning Board, the following members voted 3-1 by roll call to **GRANT** the Applicant's Site Plan Approval application for a 650 kW solar energy generating facility at 79 Old Upton Road based on the information received at the public hearing and the aforementioned findings.

<u>David Robbins, Chairman</u>	<u>NOT VOTING</u>	<u>Linda Hassinger, Member</u>	<u>AYE</u>
<u>Michael Scully, Vice Chairman</u>	<u>NAY</u>	<u>Robert Hassinger, Member</u>	<u>AYE</u>
<u>Sargon Hanna, Clerk</u>	<u>AYE</u>	<u>Andrew Clarke, Associate Member</u>	<u>ABSENT</u>

DATE OF FILING OF DECISION: BY ORDER OF THE BOARD



Joseph Laydon, Town Planner

5-5-2015

Date

cc: Applicant

- Owner
- Graves Engineering
- Board of Assessors
- Building Inspector
- Assistant Town Engineer

To Whom It May Concern: This is to certify that the 20 day appeal period has passed and there have been no appeals made to this office.

Donna Girouard, Town Clerk

Date